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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,422	07/30/2003	Andrew L. Adamiecki	Adamiecki 2-6	7836

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EXAMINER

JEAN PIERRE, PEGUY

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/630,422	ADAMIECKI ET AL.	
	Examiner	Art Unit	
	Peguy JeanPierre	2819	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 03 July 2003.

2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-22 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 03 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All    b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4/22/04</u> .	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____.
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## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement filed on 7/30/2003 has been considered.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 8-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Murray et al. (GB 2217957).

Murray et al. disclose In Figure 1, a method of converting analog duobinary signals to binary by comparing (CP1, CP2) the duobinary signals to first (X) and second (Y) reference voltages. A third binary signal is generated through an exclusive-or-gate (G) circuit based on the comparison result. The logical values (1 or 0) of the first and second binary signals are generated based on the comparison result of the analog input (Z) and the reference voltages and it is inherent that the logical values on the binary signals are determined on whether the reference voltage is higher, or lower or equal than the duobinary input signal. Figures 3-5 illustrate different connections of the reference voltages and the analog input signal to the positive and negative inputs of the comparators (CP1, CP2). The connections will inherently affect the logical values of the binary signals generated by the comparator. It is to be noted both comparators receive the same analog signal having the same amplitude. Like any converter/encoder, the

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duobinary to binary data converter is an electrical device that can be used in any communication device.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).


6. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray (GB2217957) in view of Vaziri et al.(USP 5,892,858).

Murray disclose essential features of the claimed invention as set forth above except for the bandwidth and the bit rate of the input signal and the bandwidth of the comparator, a splitter that splits the duobinary signal into a first copy and a second copy before being inputted into the comparators, respectively.

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Vaziri et al. disclose in Figure 1, a duobinary to binary encoder circuit which is a high rate system in the order of 10 Gb/s and capable of processing the duobinary signals at a predetermined bandwidth (see col. 1 lines 16 and lines 30-37). Varizi et al. further disclose a splitter that splits the duobinary analog signal (see col. 5, lines 15-21). The system of Varizi et al. will result in smaller dc component that suppresses the carrier frequency. Therefore, it would have been obvious to one having ordinary skill in the art to set the bit rate and splits the duobinary input signal and also increase the rate of processing of the converter as taught by Varizi et al. to provide a converter less susceptible to interference or other forms of disturbances and still capable to operate at a higher frequency.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peguy JeanPierre whose telephone number is (571) 272-1803. The examiner fax phone number is (571) 273-1803.

  
Peguy JeanPierre  
Primary Examiner